WHIRRAKEE

January/February 2011 Vol. 32 No. 1

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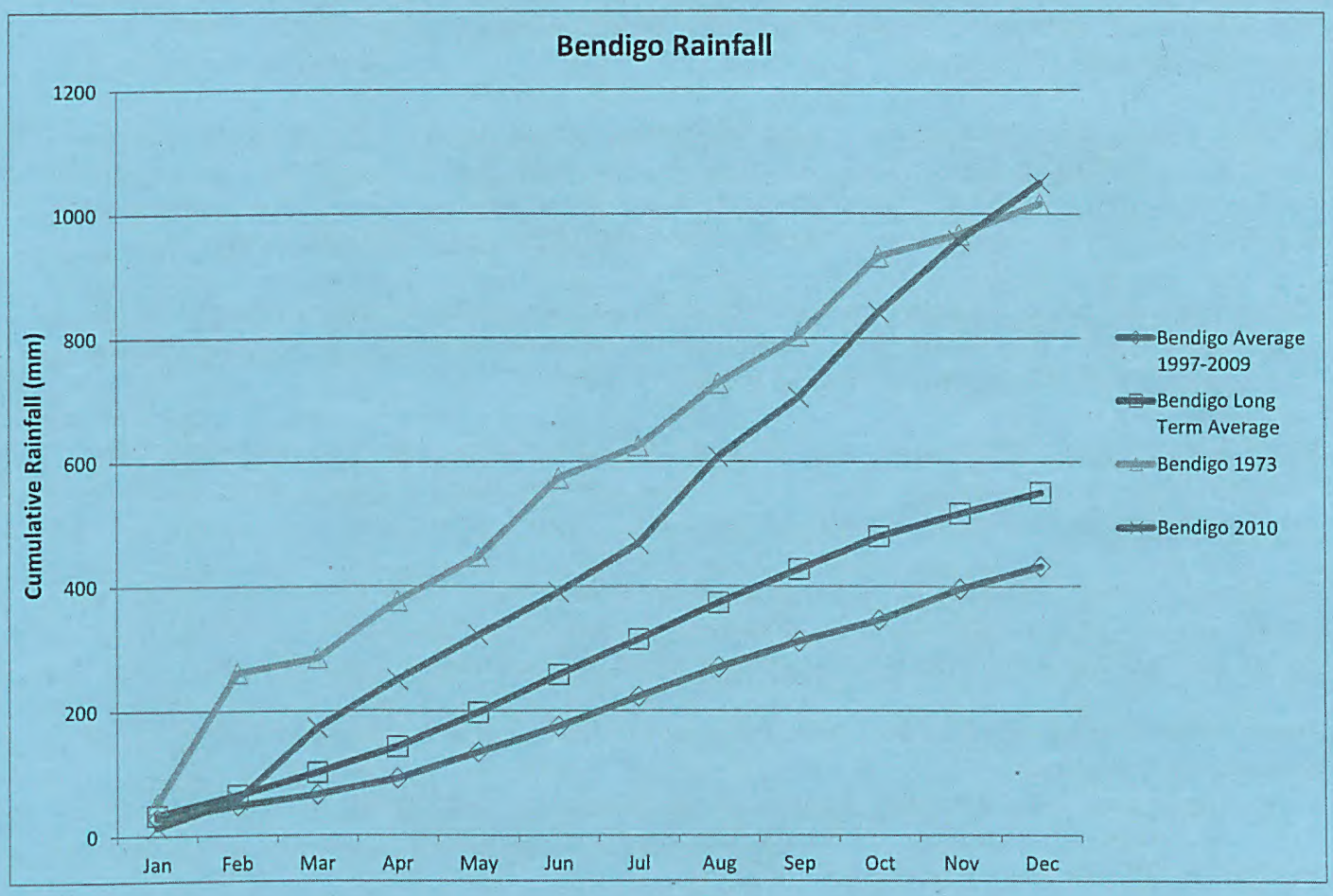

MONTHLY NEWSLETTER OF THE BENDIGO FIELD NATURALISTS CLUB

Bendigo Field Naturalists Club Inc.

Address for correspondence: PO Box 396, Bendigo 3552
ISSN 0812-423X

Office Bearers for 2010 - 2011

President	Jan Orr	5443 5668
Senior Vice President	Matthew Comer	0409 162627
Junior Vice President	*position vacant*	
Secretary	Anne Bridley	5442 6188
Minute Secretary	Joy Clusker/Rod Orr	
Treasurer	Ben Goonan	
Membership Officer	Anne Bridley	5442 6188
Excursion organiser	*position vacant*	
Syllabus organiser	Ben Goonan	
Librarian	Diana Collier (an assistant is still required)	5443 0137
Garden Convenor/Secretary	Matthew Comer	0409 162 627
Hall Management	Maurie Lewis (assisted by Rob Moors)	0407 427179
Whirrakee contact	Sabine Wilkens e-mail: s.wilkens@latrobe.edu.au	5443 2797

Membership of the Bendigo Field Naturalists Club is open to all those interested in Natural History. The subscription rates are: Single $34; Family $40; Concession: Single $28.50; Family $34. *Whirrakee* subscription only is $34.

General meetings are held on the second Wednesday of each month. The venue for General meetings is the Golden Square Senior Citizens Building, Old High Street, Golden Square. The meeting starts with a 10 minute thing-of-the night natural history segment. The invited speaker starts at 8:00pm and meetings conclude with supper. The Annual Meeting is held in September.

Committee meetings are held on the third Wednesday of each month at 6:00pm. Members of the Committee are the Office Bearer listed above and the following members: Stuart Fraser, Glenise Moors, Joy Clusker, Bill Holsworth plus *two positions vacant*

Excursions are conducted regularly and are advertised on the diary page of the *Whirrakee*. The assembly point for excursions is the Golden Square Senior Citizens Building, unless otherwise specified. Several interclub field naturalist campouts are held every year.

The Bendigo Field Naturalists Club has one sub-group (the Fauna Study Group) and is actively involved in local conservation issues. An **indigenous garden** has been established around the Golden Square Senior Citizens Building. Working bees are advertised on the *Whirrakee* diary page.

Fauna Study Group: meets on the fourth Wednesday of the month at 7:30pm in the Golden Square Senior Citizens Building.

Chairman: John Burtonclay, Fadersons Lane, Mandurang (5439 5710)
Secretary: Bill Holsworth, 13 Nabilla Crs., Bendigo (5443 4063)
Equipment Officer: Maurie Lewis (0407 427179)

Bird Observing: Club members conduct regular bird surveys. Please contact Anne Bridley 5442 6188 or Glenise Moors 5439 6254 for details. Special bird observations should be reported to Anne Bridley 5442 6188.
To propose bird observing excursions please contact Kerrie Norris 5447 8017.

Front cover photo?...see page 2

WHIRRAKEE

Monthly Newsletter of the Bendigo Field Naturalist Club
Vol. 32, No. 1, January/February 2011
Whirrakee takes its name from the Whirrakee Wattle (*Acacia williamsonii*) which is virtually endemic to the Bendigo region

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Authors are responsible for the accuracy of the information they use and also for any opinions expressed in their articles. Contributions will be included as soon as possible after they are received, although articles received more than one week after the monthly General Meeting will probably be too late for inclusion in the next issue of *Whirrakee*.
Articles in *Whirrakee* may be reproduced, but permission should be obtained from the Bendigo Field Naturalists Club, and acknowledgment should be given to the author and the Club. Some back issues are still available on request.

Editor's Note
It seems that every season is different to what we are used to. Coming home to Australia from Europe, where they have had the coldest, snowiest winter ever, I see green football ovals and abundant growth on trees and shrubs in the bush, more reminiscent of our own winter. What is going to happen next? Did birds successfully complete an additional breeding effort? Were plants flowering for longer or at different times? What will be the implication of the extra biomass on herbivores and on fire potential in the future? How did invertebrates respond? Did the declining frog fauna get a break? What is the cane toad doing? I am hoping that those of you, who are keeping close tabs on our local environment, will send in some interesting photos and observations over the next few weeks.
This issue also has some letters to the editor. Although two of the letters are based on editorial mistakes in identification/reporting, it is very good to know that people go to the trouble of responding to what they read. I hope there will be more of it.

Front page by Phil Dyson: Phil sends out regular news updates to the Northern United Forestry Group. Just before Christmas, he sent out this summary rain chart for Bendigo with the following text: *After 13 years of the worst drought most of North Central Victoria has experienced the wettest year on record. At the end of November, Bendigo rainfall was just 10 mm behind the 1973 record. In the first 10 days of December we received another 93 mm. Compared with the long-term average for December of 33.1 mm. The latest lot of rain takes us up to 1050 mm, or 34 mm ahead of the record annual total of 1016mm, recorded in 1973.*

Letters to the Editor

It is quite exciting to introduce this section. It has always been our hope to have some sort of debate going about the topics featured in the Whirrakee, *so I am keeping my fingers crossed that there will be more of it.*

Liverwort article/photos

Please forgive my interfering, but when I saw an incorrect caption on a liverwort in the October *Whirrakee* (p. 7) I thought I should give a correct ID. It was not a *Riccia* species but *Asterella drummondii*. *Riccia* species have the sporophytes whithin the thallus. I see *Asterella* a lot up here, as it is probably the most common one. The main reference I use for quick Id's is 'A Field Guide to the Mosses and Allied Plants of Southern Australia' by David Meagher and Bruce Fuhrer published by FNCV and ABRS. If you and/or the Field Nats don't have a copy, I strongly recommend getting one. I really like your articles on the cryptogams, so refreshing from the usual flowers and vertebrates.

Regards
Eric Whiting
Murrumbidgee Field Naturalists
Leeton, NSW

Asterella drummondii

Editor's note: There are at least three reasons, why cryptogams have not featured strongly in our photo collections; most members have been limited by their cameras until now, and, until last year, Bendigo had experienced a ten year drought. Also, we have very few members, who are familiar with them, so thanks very much, Eric, for the correction – it is much appreciated. I am hopeful that the Whirrakee *will have a few more from this group this year.*

Correction to Malleefowl article in December *Whirrakee*

Dear Ms Wilkens,
I write to request correction of some serious misunderstandings in the report of my address on Malleefowl to your November Meeting.

In a general overview I spoke, amongst other things, about the long-term Victorian Malleefowl Recovery Group (VMRG) population monitoring project and a separate PhD project involving genetic studies of Malleefowl, with implications for the species' management and long-term viability.

Both of these projects are carried out under strict permit conditions which include approval (among others) of the Animal Ethics Committee.

The VMRG never opens active Malleefowl mounds.

Breeding activity is confirmed by recording of external information only, then moving on quickly to minimise disturbance to the birds. Mounds are visited only once each year.

The separate research project (in 2009) involved the removal and incubation of a number of eggs, from a limited number of mounds, in one reserve only, and was overseen by Melbourne University and DSE. Some VMRG members assisted the researcher with this field-work. All chicks hatched successfully from these eggs and were released back into the wild within 24 hours of hatching.

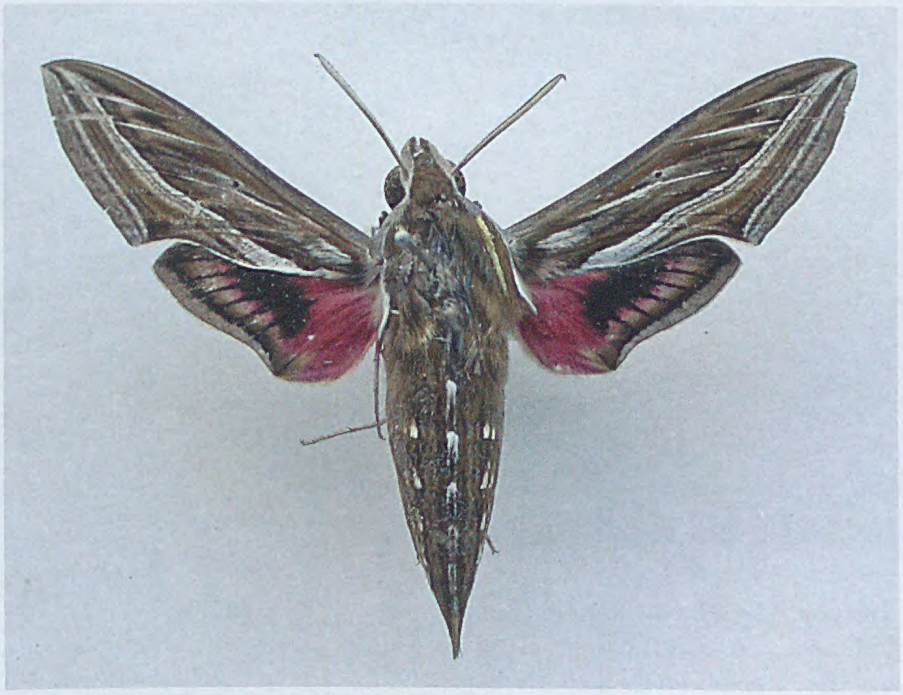
Yours sincerely,
Neil Macfarlane

My sincere apologies to Neil and members of the VMRG, for the misleading wording of the article in the December Whirrakee. *I wrote up the article from notes taken during Neil's talk (which I missed) and I supplemented these notes with information from the VMRG website. Such indirect reporting is obviously not always good idea! Ed.*

Some attractive invertebrates…

This beautiful caterpillar was feeding on Shiraz vine leaves in a Shelbourne vineyanrd in early January *Photographer: Jase*

This caterpillar occurs world-wide and comes in several different colour forms: green, brown, red or dark grey. It usually has an eyespot each side of the first and second abdominal segments, those on the first segment being larger. There are variable cryptic stripes and bands along the rest of the body. The Caterpillar has a tail-horn curved slightly backwards which tapers to a point. When disturbed, it curls into the shape of a letter 'C', tucks its head under its thorax, and expands the segments with the eyespots. No doubt these distract and deter possible predators…
(from http://lepidoptera.butterflyhouse.com.au/sphi/celerio.html)
It pupates in a shelter made from debris on the soil. The adult moth has striped brown and white fore-wings, red hind wings, and a long tongue, with which it can suck nectar on the wing. It has a wingspan of about 6 cm.
and it is…



Hippotion celerio
(Linneaus, 1758)
Vine Hawk Moth
Image from Peter Marriott (2008), Moths of Victoria CD Part 1.
(isn't it always quite amazing, when you find out that Linnaeus himself has named the animal and the name hasn't changed since)

Araneus eburnus Enamel Spider

Jan and Rod found several of these beautiful spiders, while taking photographs of Hyacinth Orchids recently. They were identified using the BFNC Spider book by Jenny Shields.

There was also a bright yellow spider in the same general area – probably also *Araneus eburnus*. ←

And this could well be the most beautiful → wevil in the world. It is the first weevil described in Australia, perhaps that is the reason for its name, the Botany Bay (Diamond) Weevil. Photographer: Joy Clusker

Two more wonderful slimemoulds

There seems no end to the variety in this kingdom, so newly explored by Joy Clusker and Rod Orr in 2010. Joy photographed these two new ones. They look like from another world, don't they?

On the Darling, a lengthening river Author and photographer: Jase

Image 1, see page 9 for description

From Menindee it is a 240 kilometres drive south to Wentworth. A geodetically astute crow would fly 195 kilometres to achieve the same relocation. The Darling River passes through Menindee and joins the Murray at Wentworth. I do not have a figure for the length of the river between the two towns, but clearly, because of the tortuous path of the Darling in that region, its course would be considerably longer than the neighbouring road, perhaps some 300 kilometres.

Fig 1 below [1] maps part of the Darling River about 120 kilometres north of Wentworth and south of Menindee. The number of sheep stations along the river gives a measure of the activity in the period when Australia travelled on the sheep's back. Polia Station is of some historic interest. The paddle steamer *Rodney*, en route to Bourke in August 1894 with a load of non-union shearers during the shearers strike, stopped for the night in the vicinity of Polia homestead. The *Rodney* was invaded by union shearers who had been camped nearby and was sunk. As the hulk settled into the mud, a shearer sitting on the river bank played 'After the Ball is Over' on a concertina to serve as an improvised requiem. [2]

The meandering nature of the river is evident from the map and from direct observation. The extent of the meandering exceeds that which could be justified by variations in the contouring or terrain. It can be observed in the field, and from topographical maps that there are meanders where the land is flat and the soil composition is uniform.

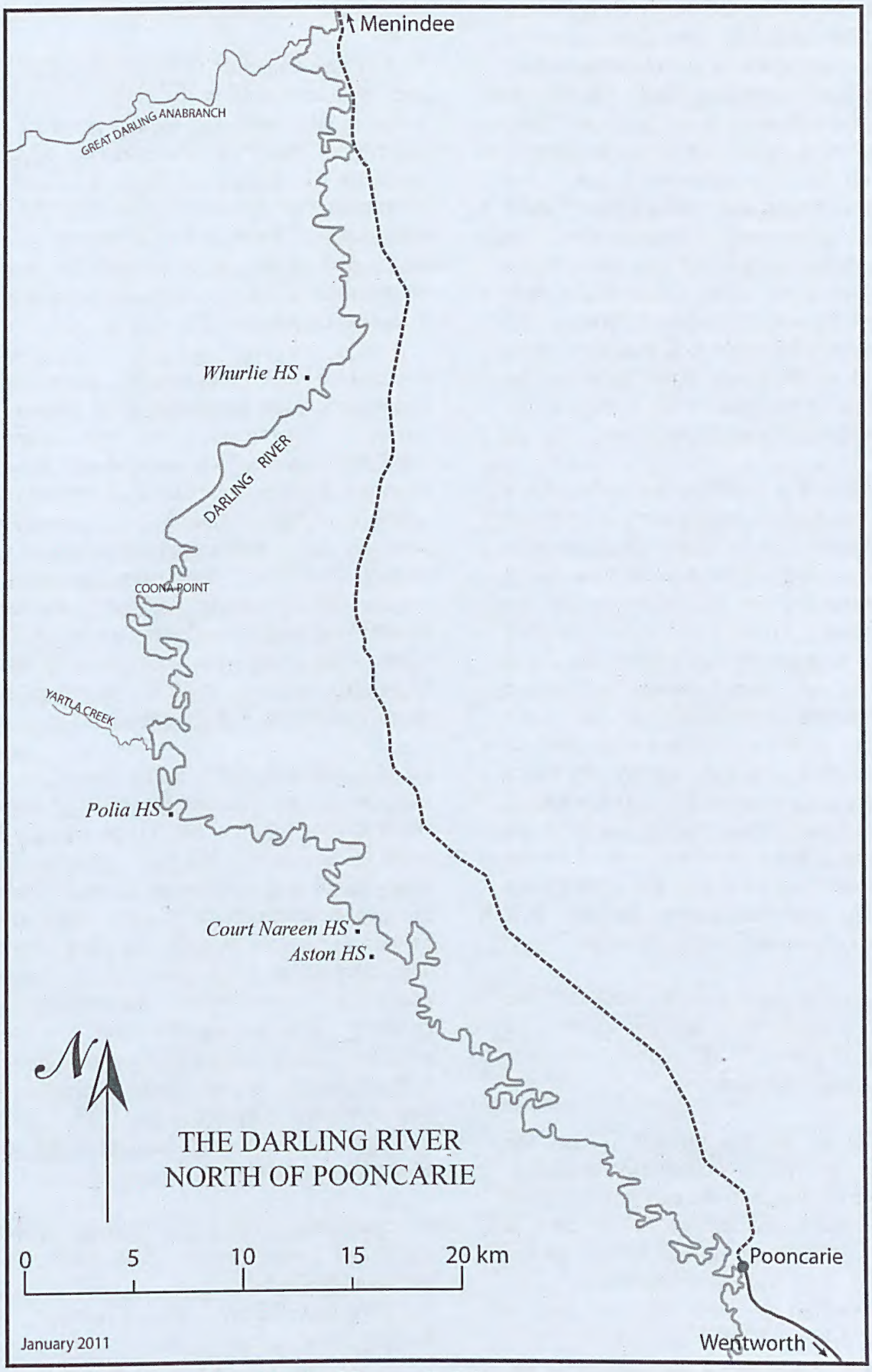


Fig 1 The Darling River North of Pooncarie [1]

Image 1 (see page 7) was recorded in November 2010 after the South West of New South Wales had had substantial rain. It shows the Darling River just (as it happened) to the north of the map in Fig 1. The river is flowing from left to right and is viewed from the inside of a bend. (The locals identify features on the river as either a point or a bend. For example, they speak of the 'Coona Point Pub.' They seem to have no notational difficulty with the geometrical requirement that for each point on one side of the river there must be a corresponding bend on the other side and vice versa.) The gradual slope of the bank on the inside of the bend and the undercutting of the bank on the outside of the bend are apparent in the image.

This situation is a consequence of Newton's First Law of Motion, which for our purposes can be expressed as 'a body will continue to travel in a straight line at a constant speed unless persuaded to do otherwise by an external force'. Given that a cubic metre of water has a mass of one tonne, the force required to convince a vigorous river to change direction is considerable. (Newton's Second Law would enable us to calculate it.) Newton's Third Law – the catchy 'for every action there is an equal and opposite reaction' (you bump heads with someone, you both feel it) – tells us that for the force exerted by the bank in deflecting the water, the water exerts an equal, but opposite, force on the bank. It is this reaction force that erodes the bank.

The fast moving water is on the outside of the bend; the relatively slow moving water is on the inside of the bend and deposits silt there to form a temperate bank.

The upshot of all this physics is that the course of the river is continually changing. An existing deviation to the east in the path of the river will move further to the east, a deviation to the west moves further to the west. The river meanders more over time, and becomes longer. We often associate a smoothing effect with the passage of time – river pebbles are smooth, not angular – but the courses of some rivers become increasingly complex with time.

And in the long run? In some locations the river will convolute to the extent that it will progress into itself and bypass some of the existing course. Such a situation appears imminent (in geological time) a couple of kilometres (as our wise crow flies) to the north-west of Pooncarie. Depending on the banks and shoals of time and the poetic inclinations of the observer, a backwater or a billabong may be formed.

A river bend progressing across the countryside may be halted by a change in terrain. Examination of the relevant 1:100,000 topographical maps shows that the contours, with an interval of 20 metres, are sparsely placed – that is, the country is basically flat – and a contour pattern is not readily discerned. Never-the-less we can assume that 'originally' (accepting the term broadly) the river flowed down a very shallow valley. Thus progressive deviations to either side must eventually reach higher ground and the rate of erosion will decrease.

Good conditions for a water course to go meandering are flat sandy soil and heavy flood events. Some 130 kilometres to the north of Menindee is the Mutawintji National Park. In the park Homestead Creek, fed from the substantial ranges to its north, flows south across sandy flats near the camping ground. This section of creek provides a compact opportunity to observe the meandering process. Interestingly the creek's western progress in the vicinity of the camping ground will eventually be constrained, should the anthropogenic barrier, a road, prove ineffectual, by the south running rocky spur of the Western Ridge.

[1] constructed from 1:100,000 maps *Cuthero 7331* and *Lake Tandou 7332*, NSW Land Information Centre

[2] Warren Fahey, ABC Hindsight, 11 January 2009

Short Notices and observations

Community Research and Environment Small Grants Initiative

From BA Vic e-News 10 January 2011, via Bill Holsworth

Birds Australia Victoria (BAV) Community Research and Environment Small Grants Initiative has the following aims:

- To support avian research conducted by nonprofessional organisations or individuals that will have a demonstrable benefit to the conservation and preservation of wild birds in Victoria.
- To support dissemination of information that will benefit the conservation of birds in Victoria by any legitimate means, including public lectures, seminars, field trips, courses and publications.
- To support practical projects aimed at conserving the avifauna of Victoria.

The BAV Committee calls for applications for the inaugural round of funding. Requests for funding of between $200 - $2,000 will be considered.

Applications can be from not-for-profit organisations, branches of organisations or individuals. Individuals are expected to be members of Birds Australia. Suitable organisations include established natural history or environmental organisations. Multiple applications from one group are not encouraged.

Applications for this round of funding close Friday 25th February 2011. All applications will be acknowledged and results of applications communicated by 26th March 2011. Late applications will not be accepted.

For full details vistit our website: http://www.birdsaustralia.com.au/the-organisation/victoria.html

Please contact Convenor, Stuart Dashper on 0404 012 385 if you have enquiries or need more information.

CICADABIRD in Bendigo?

by Anne Bridley

On Christmas morning I heard what I think is a Cicadabird in the bush at the top of Shelley St, Spring Gully (Faugh-a-ballagh).

It made 3 calls - a loud cicada like thrumming, a hoarse shriek similar to that made by a Fantailed Cuckoo & a softer chirruping call. I confirmed the calls with my bird tape, but I didn't actually see the bird. It wouldn't let me get near enough. Pizzey says the cicadabird is more often heard than seen.

I first heard the bird at the top of Shelley St. It moved away from me toward Bendigo.

Hearing the calls was both exciting and frustrating, because I havn't seen one yet, although I've heard it on occasions in the mountains (eg Strathbogie Ranges).

This is not the first report in Bendigo - when I was doing the bird book I came across an unconfirmed report of a Cicadabird.

I would love to have confirmation of the bird. I assume that the high rainfall and subsequent rise in insects is responsible for its appearance here

Dear Editor,

On a recent Saturday, at dusk (the sun had already set, the few-days-past-full moon was yet to rise) I went outside to find the air swarming with dragonflies.

As I watched, a dragonfly pursuing a mosquito flew just in front of me. In a second or so it caught (and consumed?) its prey. I watched the swarm for several minutes, and though it was clear that that an aerial banquet was occurring, I did not see another clear instance of capture. Luck had been a lady.

Jase,
Shelbourne.

Diary

The General, Bird Observers Group and Fauna Study Group meetings are held at the Golden Square Senior Citizens Building, Old High Street, Golden Square, unless otherwise indicated.

Wednesday, February 9 **7.30pm**
Paul Haw, a Boort district naturalist and author will talk about 'Flooding - a natural occurrence'

Wednesday, March 9 7.30pm
Dr Saman Seneweera, University of Melbourne will be our speaker with the topic of 'Agricultural plant responses to climate change'

Wednesday, April 13 7.30pm
Bendigo Field Naturalists Club Workshop 'Identifying local native grasses'.
Don't forget to bring along your specimens! (there was a flyer about this in the December *Whirrakee*)

May 11 7.30pm
Associate Professor Alan York from the University of Melbourne will talk about 'Invertebrate fire ecology'

Fauna Group
This group normally meets (in the clubrooms) on the fourth Wednesday of the month at 7.30pm. New and seasoned Club members are most welcome to attend.

SEANA Autumn Camp 2011 Anglesea
Friday 25 - Monday March 2011
Hosted by ANGAIR Inc.
Based at the Anglesea YMCA Recreation Camp
Excursions: - coastal heathlands & woodlands, rock pools, orchids, birds.
Registration & Payment due by 25 February.
Contact: ANGAIR Inc. PO Box 12 Anglesea 3230, ph 5263 1085
email: admin@angair.org.au

Wildlife Rescue & Information Network Inc.
W.R.I.N. is an organisation dedicated to the care of orphaned, sick or injured native animals. It is fully endorsed by the Dept of Sustainability and Environment.
Please call our Emergency Number for Help for Fauna in Need. Phone: 0419 356433.

Planned Bendigo Family Nature Club
The Bendigo Sustainability Group, BDEC and BFNC will combine their approach to this. Initial ideas/plans include Leaf Litter Jungle, Mud dwellers, Plants - alive or dead? Feb 16 Launch ~~Crusoe Res.~~ All activities will be held on 3rd Sunday of the month.
Contact Jan Orr for more details.

Loddon Shire Nature Tourism Brochure

A handy brochure with a map of the Loddon Shire on one side showing the location of various parks & reserves & notes on the other side is now available from the Loddon Visitor Information Centre. Ph 5494 3489, email loddonvisitorinformation@loddon.vic.gov.au

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Here is something to contemplate (and agree or disagree with)...

via Rod Orr

"The study of nature abates the taste of frivolous amusements, prevents the tumult of the passions and provides the mind with nourishment that is salutary by filling it with an object most worthy of its contemplation."

Jean-Jacques Rousseau, *Letters on the elements of botany, addressed to a lady*, 1794.